USACE A76 Competitive Sourcing for Information Management and Information Technology (IM/IT)

Engineer Research and Development Center (ERDC) Vicksburg Site On Site Overview

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4 August 2005

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Agenda

- Introduction of site members present
- Overview of ERDC mission
- Overview of Information Management support mission
- Overview of unique support requirements
- Drive through of ERDC-Vicksburg facilities
- Questions

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Information Management Mission

- **Plan, investigate, and oversee the information resource management program within ERDC, to provide consistent, comprehensive capabilities across all sites**

- **Evaluate, and apply the infostructure technologies (the IT required to support the network-centric Army) required to support ERDC's R&D and business processes**

- **Investigate, evaluate, and implement appropriate IT to ensure ERDC maintains its leadership and effectiveness in applying technology to meet internal and external requirements**

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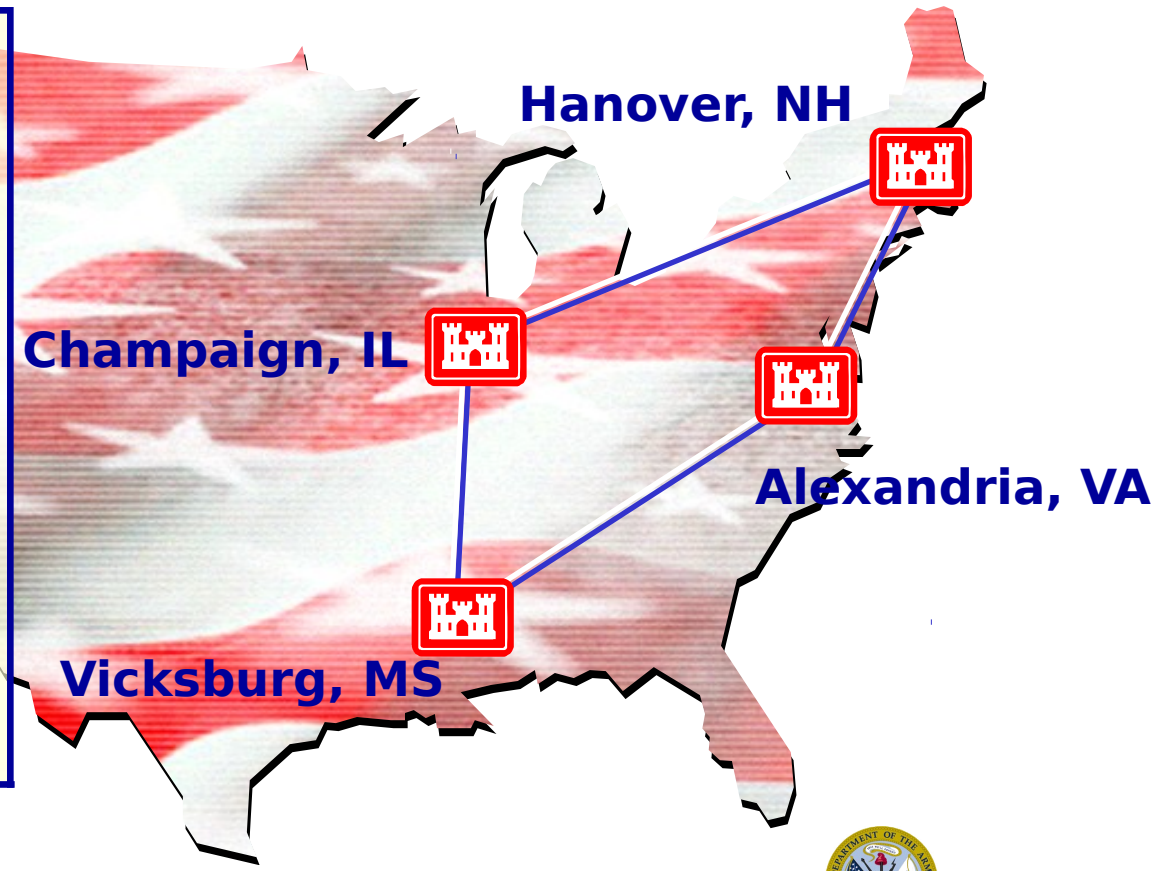
Distributed Mission

- Planning
- Comm (Data, Voice, Video)
- Computer Systems Applications
- User Desktop Support
- Publishing / Visual Information
- Records Management
- Mail and Messenger Services
- Web



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Information Assurance

- Development and oversight of ERDC IA program to establish a strong network and systems security posture and ensure compliance with DoD, Army and USACE regulations and guidance
- Develops IA policies, plans, procedures, and guidelines and conducts life cycle management of ERDC information assurance infrastructure
- Plan and integrates state of the art IA methods and technology solutions into the ERDC infrastructure

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Communications

- Conduct life-cycle management of ERDC-wide communications infrastructure and architecture including data, voice, and video technology to ensure efficient integration, compatibility, technical stability, and compliance with DoD, Army, and USACE regulations and guidance

- Develop policies, plans, procedures and guidelines to ensure effective, efficient, and stable communications resources in support of R&D and business functions

- Conceive, plan, test and integrate electronic communication technology solutions into the ERDC infrastructure

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Computer Systems

- Conduct life-cycle management of ERDC's general purpose computing systems, including operation, management, and systems administration of servers and server applications (e.g., e-mail, database, collaboration, web, and file servers)
- Provide support to general-purpose desktop computers and applications, peripherals, and personal digital assistants
- Operate Information Management (IM) Help Desk
- Conceive, plans, test and integrates information environment and collaborative technology solutions into the ERDC infrastructure

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Records Management

Conduct life-cycle management of records management services, ERDC administrative publications, forms management and maintenance of the ERDC IT capital planning information in the Information Technology Investment Portfolio System (ITIPS)

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Publishing and Technology Transfer

- Provide technical publishing services in support of ERDC's R&D mission
  - Services include both web and traditional publishing
- Support the technology transfer mission of ERDC through conceptualizing, writing, and editing visual information products

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Multimedia and Presentation

- Provide visual information services in support of ERDC's R&D and testing and evaluation
  - Services include graphic design and exhibit and display creation
- Provide photographic and video documentation and production in support of ERDC's research

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Unique IT/IM Support Requirements

- Coordination of IT/IM resources with ERDC's diverse customers and partners
- Leading edge, high demand and diversity of IT/IM requirements
- Substantial classified network and systems
- Sizeable workforce of high ranking DoD civilians

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Information Assurance Technology

- Employ multiple Intrusion Detection Systems (IDS), Joint Intrusion Detection System (JIDS), Snort
- Employ VPN Gateways to support wireless and remote network access
- IAVA distribution/response capability
- Virus detection and anti-virus software update services
- OS critical patch update services
- Network traffic data warehouse via NetDetector
- Compromised system remediation
- Interface with the RCERT, ACERT, CID and HPC CERT
- Interface with NETCOM Web Proxy Team

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Information Assurance Technology

- Security posture detection, assessment and evaluation
- IAVA and Vulnerability assessment of all networked systems ERDC-wide
- Independent tracking and database updating of all networked systems ERDC-wide
- Certification/accreditation of ERDC network and systems
- Investigate and provide new security tools, techniques, practices, and technology
- Security test and evaluation services
- Policy enforcement, training, and implementation
- Full mesh Site-to-Site VPN

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Communications

- Basic communications services
  - Telephone service
  - Long distance service
  - Calling cards
  - Cell phones
  - Pagers
  - Wireless devices
  - Data Networking services
  - Video Conferencing

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Communications

- Network Services
  - Network Management and monitoring
  - Coordinate with DREN and ARMY Netcom on DNS, Web Proxy, and Access blocks issues
  - Remote Dial-in through local and 1-800 number secured through radius authentication
  - Remote VPN connectivity for secure networking
  - LANs with switched 10/100 Mbs to desktop
  - LANs with switched 100/1000 Mbs to servers
  - Wireless network secured through VPN

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Communications

- Network Infrastructure
  - Gig-E Production Backbone spanning 700+ acre campus with 61+ subnets, IPV6 capable
  - 9 routers with 120+ switches campus wide
  - WAN connectivity via DREN and CEEIS networks
  - Secure network connectivity via SIPRNET (1.5Mbs) and JWICS with cross campus SIPRNET connectivity using encryptors over the backbone

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Communications Infrastructure

- Fiber
  - 65+ buildings and hangers
  - Single mode (40,000+ ft) (24 strand)
  - Multimode (78,000+ ft) fiber (24 strand)
- Copper wiring
  - Over 1,150,000 ft of Cat5 twisted pair cabling
  - Approximately 50,000 ft of outside and 100,000 ft of inside copper wiring (for telephone)
  - Outside cable 25 to 1800 pairs
  - 76 buildings connected to nodes via copper wire
- Maintain inside and outside cable plant on poles, pedestal, splice boxes, patch panels, etc.

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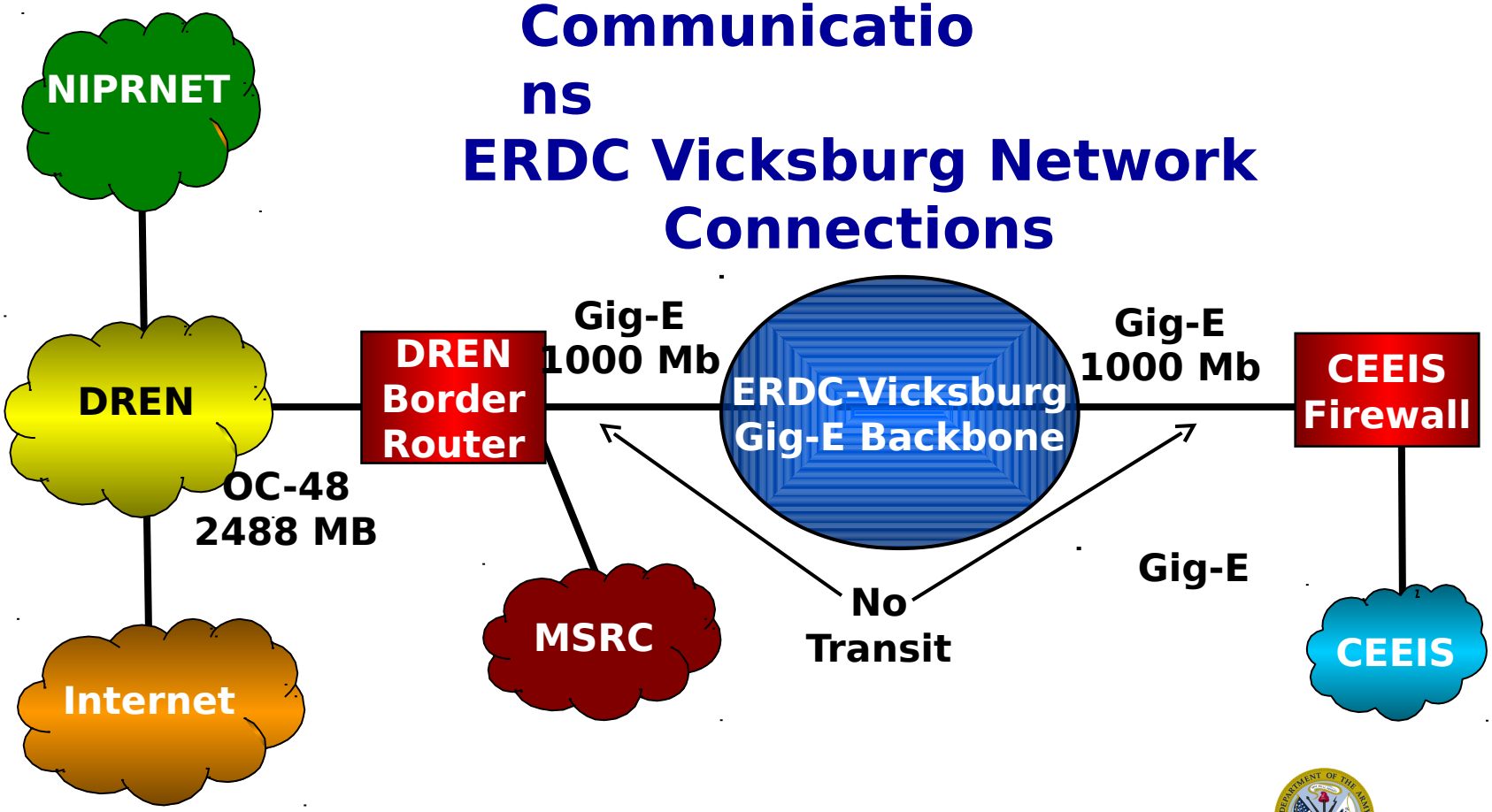
Communications ERDC Vicksburg Network Connections



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Communications

- Voice Services
  - Services provided include telephone service, long distance, calling cards, pagers, cellphones, wireless email, DSN
  - VoIP capabilities
  - 2 fulltime telephone switchboard operators for handling calls and information for the Vicksburg and Hanover sites

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Communications

- Voice Infrastructure
  - 2840 available extensions (expandable)
  - 2356 phones, (1201 digital, 1155 analog, + 161 ISDN)
  - Integrated voicemail system: 1800 mailboxes
  - Digital PBX with 6 EPN's across campus
  - External phone channels (PRI/ISDN)
    - Bell South Outbound and Inbound DID: *4 PRI*
    - FTS2001 Inbound: *1 PRI*
    - FTS2001 Inbound and Outbound Long Distance: *2 PRI*
    - *DSN: 1 PRI*

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Communications

- Video Services
  - Interactive conference room and desktop Video Teleconferencing via ISDN and IP
  - Video distribution system
  - Integration of collaboration tools, including LiveMeeting
  - Interactive auditorium VTC with bridging capabilities for multiple location meetings
  - Integrated voice/video/data capabilities
  - Support the setup and troubleshooting of most VTCs

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Communications

- Video distribution network
  - Coaxial/fiber distribution network to 12 buildings with 8 channels broadcast
  - Control center downlink capability
    - 4 Direct-TV receivers
    - 1 C/Ku-Band channel
  - Digital Doppler Radar Feed
  - Tape broadcast capability
  - 1 closed-circuit remote input feed (Auditorium)

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Communications

- Audio/Video Capabilities
  - Group video conferencing
  - Desktop video conferencing
  - Multi-point conferencing capability
  - Audio conferencing
  - Streaming media

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Communications

- Group VTC facilities
  - 1 ERDC main VTC room
  - 10 additional lab-maintained group rooms
  - 1 mobile system
  - Connectivity: ISDN (PRI and BRI) and IP

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Communications

- Streaming Media
  - 2 Streaming servers
    - 1100 stream license
    - Video-on-Demand or Live
    - Streaming formats: Real Media, Windows Media, and QuickTime
  - Audio/Video encoders
    - 2 (ITL)
    - ~10 (CHL)
    - 1 (ITL MSRC)

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Records Management Services

- Conducts life-cycle management of records management services, ERDC administrative publications, forms management
- Maintenance of the ERDC IT capital planning information in the Information Technology Investment Portfolio System (ITIPS)
- Capture, preserve and provide continued access to essential evidence that documents the agency's decisions and actions
- Provide for the efficient, most cost effective and systematic life-cycle management of all information of record value regardless of format or media.
- Manages ERDC copier program

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Publishing and Technology Transfer

- Technical Publishing
  - R&D proposals
  - Journal articles
  - Conference papers
  - Brochures
  - Fact Sheets
  - Technical reports
- Technology Transfer
  - Work with program managers of major R&D programs and research laboratories to transfer technology that emerges from R&D work units
  - Conceptualize and write/edit special presentations, articles, bulletins, videos, pamphlets, brochures, special exhibits
- Listserver for a variety of distribution lists

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Multimedia Presentation Technology

- Ultra-high speed photographic documentation of classified and unclassified R&D projects, digital photography on location and in studio
- Web, CD, and DVD authoring capabilities to include PDF, HTML, MPEG, and AVI formats
- Large-format printing for technical and program exhibits, displays, posters, and photographs
- Design of brochures, pamphlets, technical and program exhibits, displays, posters, web pages, logos and signage
- Video pre and post production including; script writing, narration, videography, video and sound libraries, and non-linear digital editing